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APPLICATI	ON NO. F	ILING DATE	FIRST NAMED INVENTOR	VENTOR ATTORNEY DOCKET NO. CONFIRMATION		
10/033	436	12/28/2001	Ehrich J. Braunschweig	57283US002	9278	
. 32692	7590	02/17/2004		EXAM	EXAMINER	
	3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427			MCDONALD, SHANTESE L		
	ST. PAUL, MN 55133-3427			ART UNIT	PAPER NUMBER	
				3723	<del> </del>	

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

J. C	Application No.	pplicant(s)				
	10/033,436	BRAUNSCHWEIG ET AL.	,			
Office Action Summary	Examiner	Art Unit				
	Shantese L. McDonald	3723				
The MAILING DATE of this communication Period for Reply	appears on the cover sheet	with the correspondence address	•			
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, a If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by standard patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may reply within the statutory minimum of the dwill apply and will expire SIX (6) Moatute, cause the application to become	a reply be timely filed  airty (30) days will be considered timely.  DNTHS from the mailing date of this communical  ABANDONED (35 U.S.C. § 133).	tion.			
Status						
1) Responsive to communication(s) filed on 1	<u> 6 December 2003</u> .					
2a)☐ This action is <b>FINAL</b> . 2b)⊠ ∃	This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits						
closed in accordance with the practice und	nce with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-32 is/are pending in the applicate 4a) Of the above claim(s) 17-32 is/are without 5) Claim(s) is/are allowed.  6) Claim(s) 1-16 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and	drawn from consideration.					
Application Papers						
9) The specification is objected to by the Exam 10) The drawing(s) filed on is/are: a) Applicant may not request that any objection to Replacement drawing sheet(s) including the cor 11) The oath or declaration is objected to by the	accepted or b) objected to the drawing(s) be held in abey rection is required if the drawin	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.12				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:  1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International But * See the attached detailed Office action for a	nents have been received.  The sents have been received in priority documents have been reau (PCT Rule 17.2(a)).	Application No In received in this National Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB Paper No(s)/Mail Date	Paper N	v Summary (PTO-413) o(s)/Mail Date f Informal Patent Application (PTO-152) 				

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3,5-10 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romero in view of Law et al.

Romero teaches a backing, 12, for an abrasive article comprising a sheet like polymeric substrate, having a first major surface including a uniform or random pattern of non-abrasive raised and depressed areas, 20, 14. Romero also teaches an abrasive coating, 26, comprising silicon carbide abrasive particles and a binder make coating selected from acylate resins, and a size coating selected from a group consisting of phenolic resins, over the make coat, (col. 8, lines 18-67). Romero teaches all the limitations of the claims except for the backing having a filament stems having flattened distal ends integrally shaped in the second major surface. Law et al. teaches a backing with filament stems having flattened distal ends, (fig.9). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to provide the abrasive article of Romero with a backing having filament stems, as taught by Law et al., in order to enhance the backings attachment capabilities.

Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romero in view of DeVoe

Romero teaches all the limitations of the claims except for hook elements integrally shaped into the second major surface of the backing pad. DeVoe et al. teaches hook elements, 203, integrally shaped into the second major surface of the backing pad. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the abrasive article of Romero with a hook elements integrally shaped into the second major surface of the backing pad, as taught by DeVoe, in order to enhance the backings attachment capabilities.

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## Response to Arguments

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Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantese L. McDonald whose telephone number is (703) 308-8722. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (703) 308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.L.M. February 4, 2004

Joseph J. Hail, III Supervisory Patent Examiner Technology Center 3700